PATENT App. Ser. No.: 10/092,987 Atty. Dkt. No. ROC920010332US1

PS Ref. No.: IBMK10332.Y1

## REMARKS

This is intended as a full and complete response to the Office Action dated July 14, 2005, having a shortened statutory period for response set to expire on October 14, 2005. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-23 are pending in the application. Claims 1, 12, and 18 have been amended to correct a minor editorial problem. Claims 1-23 remain pending following entry of this response.

## Claim Rejections - 35 U.S.C. § 103

Claims 1-8 and 10-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable *Bodamer et al.* (US 6236997, hereinafter "*Bodamer*") in view of *Brown et al.* (US 2003/0093408, hereinafter "*Brown*"). Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the first and third criteria.

For example, Bodamer fails to disclose providing an integrated development environment configured to recommend optimizations for source code, as recited by claims 1, 12 and 18. Rather, Bodamer discloses performing a conversion on an SQL statement based on analysis of the SQL statement by a transaction services module at runtime. The converted SQL statement is then passed to the appropriate process for execution. For example, a passage from Bodamer cited by the Examiner illustrates the conversion process: "Hence, the appropriate module 210 generating the request

Page 6

PATENT
App. Ser. No.: 10/092,987
Atty. Dkt. No. ROC920010332US1
PS Ref. No.: IBMK10332.Y1

performs a substitution to convert the SQL statement from 'select \* from allusers@FDS' to 'select \* from (select \* join A, B)@FDS', which is then passed to the FDS database in step 522". Bodamer, 17: 52-54. More generally, Bodamer discloses techniques for determining if a SQL query submitted by a client application should be executed against a local database system, a foreign database system, or an external routine, based on the structure of the SQL query. Depending on how the SQL query is ultimately executed, the conversion process cited above may be necessary as part of query processing. However, Bodamer fails to disclose techniques for providing programming assistance within an integrated development environment, and nothing in the material cited from Bodamer cited includes a source code statement that references the result of an SQL query, as recited by claims 1, 12, and 18. Quite the contrary, the material from Bodamer discloses that an SQL query that may undergo a conversion, depending on how a transaction module decides to execute the query. Not surprisingly, therefore, Bodamer fails to disclose providing an integrated development environment configured to recommend optimizations to a user interacting with the integrated development environment, in the manner claimed.

Furthermore, regarding claims 1, 12 and 18, Bodamer, in view of Brown, fails to disclose retrieving the structured query language (SQL) statement corresponding to the source code statement, and presenting a user interacting with the integrated development environment with a recommendation for optimizing the retrieved SQL statement, relative to the source code statement. Brown discloses displaying SQL statements from a database query log. For example, Brown provides: "To retrieve a set of SQL statements to be analyzed, the user specifies the selection criteria based on which the SQL statements are retrieved from the database query log". Brown, ¶ 221. No optimization is recommended, or even contemplated, for a given SQL query, relative to a source code statement or otherwise. Rather, the passage is directed to presenting a user with a log of database queries. Thus, Brown fails to disclose a device configured to retrieve the structured query language (SQL) statement corresponding to the source code statement, and presenting a recommendation for optimizing the retrieved SQL statement, relative to the source code statement.

Page 7

PATENT

App. Ser. No.: 10/092,987 Atty. Dkt. No. ROC920010332US1

PS Ref. No.: IBMK10332.Y1

Additionally, the Examiner states that one of skill in the art would be motivated to combine *Bodamer* and *Brown* and "to allow a user to create, manipulate, and query a database and to allow a user to alter the queries submitted to dynamically modify or enter SQL statements and quickly see results". See Office Action, p.3. However, nothing in the present claims are directed to allowing a user to "create, manipulate, and query a database" or "to allow a user to alter the queries submitted to dynamically modify or enter SQL statements and quickly see results." Instead, the present claims are directed to providing an integrated development environment that provides programming assistance. Therefore, Applicants submit that the Examiner's basis for rejection is not on point and, consequently, the rejection is improper.

Accordingly, for all the foregoing reasons, Applicants believe that claims 1-8 and 10-23 are allowable, and respectfully request, therefore, that the rejection be withdrawn.

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable *Bodamer* in view of *Brown* and further in view of *Helgeson* et al. (US 6643652, hereinafter *Helgeson*). Applicants respectfully traverse this rejection.

Claim 9 depends from independent claim 1. Applicants believe the above remarks traverse the rejections of these independent claims. Accordingly, Applicants submit that rejection of this dependent claim is overcome without the need for further remarks and respectfully request that the rejection be withdrawn.

Claims 1-8 and 10-23 are rejected under 35 U.S.C. §103(a) as being unpatentable *Jou et al.* (US 5822750, hereinafter "*Jou*") in view of *Brown*. Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or

PATENT
App. Ser. No.: 10/092,987
Atty. Dkt. No. ROC920010332US1
PS Ref. No.: IBMK10332.Y1

references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the first and third criteria.

For example, Jou fails to teach a method of programming assistance that includes the step of receiving a selected fragment of source code, wherein the source code fragment includes a source code statement that references a result of a structured query language statement (SQL), as recited by claims 1, 12 and 18. Rather, the passages cited from Jou disclose interpreting and executing SQL statements embedded in source code, during the runtime of an application. For example, in describing Figure 7, Jou provides: "FIG. 7 is a flow diagram that illustrates the steps necessary for the interpretation and execution of SQL statements embedded in source code for batch operation...". Jou, 12: 48-50. Figure 7 illustrates processing and compiling source code with embedded SQL statements. The source code discussed in Jou includes the embedded SQL statements, it does not, however, include a source code statement that includes a reference to a result of an SQL statement. Thus, Jou fails to disclose receiving a selected fragment of source code, wherein the source code fragment includes a source code statement that references a result of a structured query language statement (SQL). As such, Jou fails to disclose a method of providing programming assistance that includes this limitation.

Furthermore, regarding claims 1, 12 and 18, Jou, in view of Brown, fails to disclose retrieving the structured query language (SQL) statement corresponding to the source code statement, and presenting a user interacting with the integrated development environment with a recommendation for optimizing the retrieved SQL statement, relative to the source code statement. As demonstrated above, Brown fails to disclose this limitation. Instead, the passages cited from Brown are directed to presenting a log of queries to a user.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable *Jou* in view of *Brown* and further in view of *Helgeson*. Applicants respectfully traverse this rejection.

Page 9

PATENT

App. Ser. No.: 10/092,987 Atty. Dkt. No. ROC920010332US1

PS Ref. No.: IBMK10332.Y1

Claim 9 depends from independent claim 1. Applicants believe the above remarks traverse the rejections of these independent claims. Accordingly, Applicants submit that rejection of this dependent claim is overcome without the need for further remarks and respectfully request that the rejection be withdrawn.

## Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

Randol W. Read

Registration No. 43,876

PATTERSON & SHERIDAN, L.L.P.

3040 Post Oak Blvd. Suite 1500

Houston, TX 77056

Telephone: (713) 623-4844 Facsimile: (713) 623-4846

Attorney for Applicant(s)